

WHAT IS CLAIMED IS:

1. A dispenser device comprising:
 - a plurality of reservoirs each for containing a respective substance;
 - a pump associated with each said reservoir, and each pump being associated with a movable control member which, when actuated, causes a substance contained in the reservoir associated with the pump to be dispensed;
 - a pushbutton;
 - at least one elastically-deformable transmission member associated with at least one of the control members and configured in such a manner as to transmit displacement of the pushbutton to the at least one control member in order to dispense substance; and
 - at least one adjustment member that adjusts an end-of-stroke position of the displacement at least of the control member associated with the at least one elastically deformable transmission member.
2. A device according to claim 1, wherein the at least one elastically deformable transmission member comprises at least two elastically-deformable transmission members, each configured to transmit displacement of the pushbutton to an associated one of the control members in order to dispense substance, each elastically-deformable transmission member being configured in such a manner as to deform when the associated one of the control members reaches the end-of-stroke position before the other of the control members, thereby enabling the pushbutton to continue moving and driving the other of the control members.
3. A device according to claim 1, further comprising actuator members movable relative to the pushbutton and associated respectively with the control members, each of the elastically-deformable transmission members being interposed between a surface of an associated said actuator member and the pushbutton.

4. A device according to claim 3, wherein each actuator member comprises a rod slidable in a tubular guide of the pushbutton, and wherein the elastically-deformable member associated with said actuator member is disposed around the rod.

5. A device according to claim 3, wherein the actuator members are connected together by an elastically-deformable coupling assembly.

6. A device according to claim 5, wherein the coupling assembly comprises flexible arms that connect each of the actuator members to a central rod.

7. A device according to claim 6, wherein said central rod has an axis, and wherein the flexible arms together form an S-shape when the coupling assembly is observed along the axis of the central rod.

8. A device according to claim 5, wherein the coupling assembly includes endpieces fixed to the pushbutton through which the substance delivered by each of the pumps can be delivered to the pushbutton.

9. A device according to claim 8, comprising flexible hoses through which substances delivered by the pumps can flow from the actuator members to housings that communicate with said endpieces.

10. A device according to claim 1, wherein each control member comprises a pump rod.

11. A device according to claim 3, wherein each control member comprises a pump rod.

12. A device according to claim 11, wherein an endpiece is configured to enable a flexible hose to be connected to convey substance delivered by the pump to a dispenser orifice.

13. A device according to claim 4, wherein each control member comprises a pump rod;

wherein each actuator member comprises an endpiece which is mounted at an end of the pump rod; and

wherein the elastically-deformable element is a spring having one end bearing against the endpiece and an opposite end bearing against the tubular guide.

14. A device according to claim 13, wherein the spring comprises a helical spring.

15. A device according to claim 3, wherein the adjustment member has a plurality of surfaces situated at different heights and against which the actuator members come to bear when the associated control members reach the respective end-of-stroke positions.

16. A device according to claim 15, wherein the adjustment member comprises a plurality of tongues, and wherein each of said surfaces is formed by a top edge of a said tongue.

17. A device according to claim 16, wherein the adjustment member is rotary, and wherein said tongues are elastically deformable and configured to deform elastically in contact with at least one of the control members during rotation of the adjustment member.

18. A device according to claim 17, wherein the tongues are configured in such a manner that in a position of the adjustment member corresponding to dispensing a mixture, at least one of the control members is situated between portions of two consecutive said tongues which inhibit the adjustment member from rotating.

19. A device according to claim 17, wherein each said tongue comprises a rounded portion in which a control member is received when the tongue is in a position for adjusting the stroke of the control member.

20. A device according to claim 16, wherein said tongues are of different heights, and wherein the tongues have bottom edges that are situated substantially in the same plane.

21. A device according to claim 16, wherein each tongue has a bottom edge, and wherein each tongue, in a position for adjusting the stroke of the associated control member, bears against a surface, said surface being fixed relative to a body of the corresponding pump.

22. A device according to claim 1, further comprising a base portion having an outer skirt provided with at least one window that provides access to the adjustment member in order to rotate the adjustment member.

23. A device according to claim 22, wherein the at least one window comprises two opposite windows.

24. A device according to claim 22, wherein the adjustment member has a tubular wall provided with reference marks.

25. A device according to claim 1, wherein the pushbutton comprises:
a top portion defining a bearing surface that enables a user to actuate the pushbutton; and
an elastically-deformable skirt that extends from said top portion away from the bearing surface.

26. A device according to claim 1, further comprising an outlet orifice provided with a check valve.

27. A device according to claim 1, wherein the check valve is made of elastomer.

28. A device according to claim 1, further comprising a base portion on which the pumps are mounted and relative to which the pushbutton is movable.

29. A device according to claim 28, wherein the base portion comprises at least one relief portion against which the adjustment member is snap-fastened such that the adjustment member is free to rotate while being substantially prevented from moving axially.

30. A device according to claim 1, wherein the adjustment member comprises two coaxial rotary rings having tongues for adjusting the end-of-stroke position of at least the control member associated with the transmission member.

31. A device according to claim 30, wherein the rings are interconnected by at least one gear.

32. A device according to claim 30, wherein the tongues comprise facing concave surfaces.

33. A device according to claim 1, wherein the reservoirs comprise flasks that are assembled to the device.

34. A device according to claim 33, wherein each of said flasks has a cross-section that is substantially semicircular in shape.

35. A device according to claim 33, wherein the flasks are assembled to the device via a section member on which the flasks are engaged.

36. A device according to claim 35, wherein the section member has at least two walls forming an angle therebetween, and wherein at least one of the flasks is configured to bear against said walls.

37. A device according to claim 36, wherein at least one said flask has two grooves in which said walls engage.

38. A device according to claim 35, wherein the section member comprises a central portion of elongate shape extending over at least a major part of a height of the flasks, with two pairs of ribs extending from respective longitudinal sides of said central portion, each pair of ribs forming an outwardly-open V-shape when the section member is observed in cross-section.

39. A device according to claim 28, wherein the reservoirs comprise flasks that are assembled to the device, and wherein the flasks are engaged on a section member which is secured to the base portion.

40. A device according to claim 39, wherein the section member is monolithically formed with the base portion by molding a plastics material.

41. A device according to claim 1, wherein at least one of the reservoirs contains a sunscreen.

42. A device according to claim 41, wherein at least one other of the reservoirs contains a moisturizer.

43. A device according to claim 10, wherein the pump rod has an internal channel through which substance delivered by the corresponding pump can be dispensed.

44. A device according to claim 11, wherein the pump rod has an internal channel through which substance delivered by the corresponding pump can be dispensed.

45. A device according to claim 13, wherein the pump rod has an internal channel through which substance delivered by the corresponding pump can be dispensed.

46. A device according to claim 15, wherein the different heights are selected in such a manner that the sum of the strokes over which the control members travel is constant for all positions of the adjustment member.

47. A device according to claim 24, wherein the reference marks comprise graduations representative of different compositions to be dispensed.

48. A device according to claim 1, wherein the plurality of reservoirs comprises two reservoirs.

49. A method of simultaneously dispensing a plurality of substances comprising:
providing the dispenser device of claim 1;
providing a first substance in a first said reservoir;

providing a second substance in a second said reservoir;

adjusting the end-of-stroke position of the displacement at least of the control member associated with the at least one transmission member;

displacing the pushbutton and transmitting the displacement of the pushbutton to the control members of the pumps to dispense the first and second substances in a desired proportion.

50. The method of claim 49, wherein the first substance comprises a sunscreen.

51. The method of claim 50, wherein the second substance comprises a moisturizer.